

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1430 Alexascins, Virginia 22313-1450 www.nepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,594	09/16/2005	Henrik Orum	36731-000053/US	8831
30593 7590 03/07/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910			EXAMINER	
			BOSWELL, CHRISTOPHER J	
RESTON, VA 20195			ART UNIT	PAPER NUMBER
			3673	•
			MAIL DATE	DELIVERY MODE
			07/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/524,594 ORUM ET AL. Office Action Summary Examiner Art Unit CHRISTOPHER BOSWELL 3673 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 18 March 2009. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1.2.4-14 and 16-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1,2,4-14 and 16-32 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 15 February 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date \_\_\_\_\_\_\_.

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

Application/Control Number: 10/524,594 Page 2

Art Unit: 3673

#### DETAILED ACTION

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-14, 16-24 and 28-32 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 4,454,824 to Wood.

Wood discloses a safety-fastener (10) to be secured by fastening, the fastener comprising at least a threaded tip (22) having a hollow channel (channel defined between 34 and 36) defined at least partly therein, and a rod (18) having a hollow channel (aperture disposed within element 18) defined at least partly therein, and a locking element (42) housed at least partly within the hollow channel of the threaded tip and or the hollow channel of the rod (figure 6), the threaded tip and rod being interconnected in a joint (28), the joint inhibiting axial movement of the rod relative to the threaded tip (at the joint the rod and threaded tip are statically engaged) and the joint allowing transmission of rotational movement from the rod to the threaded tip in one locked state and preventing transmission of rotational movement from the rod to the threaded tip in another unlocked state (column 2, lines 56-68), wherein the channel of the threaded tip is generally aligned with the channel of the rod at the joint such that the locking element can move within the channels between the threaded tip and rod (figures 4-6), and wherein the joint is locked by the insertion of the locking element into the joint and into a rotationally locking

engagement at least partly within the channel of the rod and at least partly within the channel of the threaded tip (column 2, lines 40-48), as in claim 1.

Wood also discloses the safety-fastener being adapted to allow reversible shifting between the locked and the unlocked state (column 2, lines 56-68), as in claim 2, wherein the rod comprises a gripping means (54) extending in a direction opposite to the threaded tip for applying a torque to the rod, as in claim 4, and where the threaded part contains at least threads (figure 4), as in claim 12, as well as the length of the threaded part is at least 50% of the entire length of the safety-fastener (figure 4), as in claim 13, as well as locking means adapted to receive a pad-lock (52) for locking the locking element in either the locked and/or the unlocked states of the fastener, as in claim 18, and the rod comprises attachment means for securing peripheral objects to the fastener (via insertion of the peripherals into the lock assembly; column 3, lines 10-21), as in claim 19, wherein the object is a beach safety-box (column 1, lines 5-33), as in claim 20.

Wood further discloses the joint is locked by the insertion of the locking element (36 and 40) into a rotationally locking engagement in the rod and the threaded tip (column 2, lines 40-48), as in claim 3, wherein the locking element is accessible from a top portion of the rod opposite to the threaded tip so as to allow shifting between the locked and the unlocked state on a mounted safety-fastener (figure 4), as in claim 5, and the joint being shifted from the locked to the unlocked state and vice versa by the removal of the locking element from the joint (column 2, lines 40-48), as in claim 6, as well as the joint being shifted from the locked state to the unlocked state by irreversible breaking of the locking element within the joint (column 1, line 66-column

Application/Control Number: 10/524,594

Art Unit: 3673

2, line 4), as in claim 7, wherein the locking element is adapted to break at a pre-specified torque (column 1, line 66-column 2, line 4), as in claim 8.

Wood additionally discloses the safety-fastener being adapted to allow reversible shifting between the locked and the unlocked state by displacement of the locking element in the axial direction of the fastener (column 2, lines 40-48), as in claim 9, wherein the locking element is displaced in a direction from the rod towards the threaded part (the locked state is achieved by axially displacing the locking element towards the threaded part), as in claim 10, and the locking element being displaced in a direction from the threaded part towards the rod (the unlocked state is achieved by axially displacing the locking element towards the rod), as in claim 11.

Wood also discloses the rod being provided In the form of a hollow tube that houses the locking element (figure 6), as in claim 14, further comprising a handle member (54) arranged to control the moving of the locking element from a top portion, opposite the threaded tip of the rod (figure 4), as in claim 16, and fixating means (42 and 52) allowing fixation of the locking element in any of the locked and/or unlocked states, as in claim 17, wherein the joint is shifted between the locked and unlocked state by respectively removing and inserting the locking element into the safety-fastener (column 2, lines 40-68), as in claim 21.

Wood further discloses the joint is unlocked by movement of the locking element out of the joint and out of rotationally locking engagement with at least one of the rod and the threaded tip (in the unlocked state, the locking element is moved into a condition that allows the assembly to be rotated so as to be placed in the desired surface), as in claim 29, wherein the unlocked state of the joint the locking element is disposed out of the channel of the rod and substantially within the channel of the threaded tip (figure 6), as in claim 32, as well as the locking element

frictionally engages the rod and the threaded tip at least partly within the channel of the rod and at least partly within the channel of the threaded tip to lock the joint (when in the unlocked stated the locking element directly contacts the rod and the threaded tip, all whilst the locking element is disposed within the channels), as in claim 30.

Page 5

Wood additionally discloses a lock safety-fastener comprising a fastener (22) and a lock (52) wherein the fastener includes an insertion-region (the auger on the end of element 22) which can be used for attachment into a solid material, and a lock-accepting region (12) which protrudes from the solid material, and wherein the attachment and locking of the lock to the lock-accepting region allows the lock to rotate freely around the lock-accepting region in its locked state thereby significantly hindering the possibility for loosening the fastener (column 2, lines 56-68), and wherein the attachment of the lock to the lock-accepting region of the fastener includes inserting the lock-accepting region into the lock such that the lock substantially covers the lock-accepting region (figure 2 shows the lock being over the lock-accepting region), as in claim 22.

Wood also discloses the insertion-region of the fastener is threaded and wherein the lock-accepting region comprises a gripping means (54) for applying torque to the fastener thereby enabling the fastener to be secured by screwing, as in claim 23, wherein the lock is constructed such that it can be attached to the lock-accepting region of the fastener when unlocked (via eyelet 50), cannot be detached from the lock-accepting region of the fastener when locked (when the lock is in the locked state, it can not be removed from the eyelet), can rotate freely on the lock-accepting region of the fastener when locked (column 2, lines 56-68), and prevents the lock-

accepting region of the fastener and the fastener-head to be accessed by gripping tools when locked (column 2, lines 64-68), as in claim 24, and the use of the lock safety-fastener to secure objects against unauthorized removal (column 3, lines 10-21), as in claim 28.

Wood further discloses a fastener having a body (22) having threads (the auger end of the body) extending at least partly around the body (figure 4) and a channel (channel established between 34 and 36) extending at least through the body, a head (10) coupled to the body and having a channel (aperture disposed within element 18) extending at least partly through the head, the channel of the head being generally aligned with the channel of the body and including a cross-sectional shape substantially similar to a cross-sectional shape of the channel of the body (figures 7 and 8), a locking element (42) positionable at least partly within the channel of the threaded tip and at least partly within the channel of the head (figure 6), wherein the head is coupled to the body at a joint that inhibits axial movement of the head relative to the body (the body is statically attached to the head), the joint being configured to inhibit the body from moving either towards or away from the head (column 2, lines 30-40), the joint allowing transmission of rotational movement from the head to the body in a locked state (when the locking element is in the lowered position, a user can rotate the assembly) and inhibiting transmission of rotational movement from the head to the body in an unlocked state (when the locking element is in the raised position, there is no rotational force applied to the body), wherein the locking element is moveable within the channels of the body and the head to allow shifting of the joint between the locked state and the unlocked state (the locking element axial movable), wherein in the locked state of the joint the locking element is disposed at least partly within the

channel of the body and at least partly within the channel of the head in engagement with both the body and the head so that rotational movement of the head is transmitted to the body (when in the locked state, the locking element engages the head and the body to allow a user to rotate the threaded tip), and wherein in the unlocked state of the joint the locking element is disposed out of engagement with at least one of the body and the head so that rotational movement of the head is not transmitted to the body (column 2. lines 56-68), as in claim 31.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood, as applied above, in view of U.S. Patent Number 3,817,063 to Williams.

Wood discloses the invention substantially as claimed. Wood discloses the use of a pad lock (52) to lock the safety fastener. However, Wood does not explicitly disclose the pad lock being a code-lock. Williams teaches of a padlock being a code-lock (10), as in claim 25, wherein the lock has a plurality of numbered discs (66), as in claim 26, and the user can program the lock (column 3, line 52-column 4, line 6), as in claim 27, in the analogous art of lock assemblies use to secure containers in a lock state for the purpose of having a lock that does not need the use of a key to place the padlock in an unlocked state. It would have been obvious to one with ordinary skill in the art at the time the invention was made to utilize a code lock, as taught by Williams, in

the safety-fastener of Wood in order to have a lock that does not need the use of a key to place the padlock in an unlocked state.

## Response to Arguments

Applicant's arguments filed March 18, 2009 have been fully considered but they are not persuasive. In response to the argument that Wood does not disclose a safety-fastener wherein the joint is locked by the insertion of the locking element into the joint, the examiner respectfully disagrees. Wood discloses the locking element is permanently retained in the joint at all times, and thus locking element must be inserted into the joint during assembly of the safety-fastener to function in the desired manner.

Regarding the argument that Wood does not disclose wherein the joint is shifted from the locked state to the unlocked state by irreversible breaking of the locking element within the joint, the examiner respectfully disagrees. One possible method for an unauthorized user to remove the safety-faster from the desired environment is to break the locking element to gain access to the joint.

In regards to the argument that Wood does not disclose the locking element is adapted to break at a pre-specified torque, the examiner respectfully disagrees. As it is well known materials shear at a given amount of stress, accordingly, the locking element of Wood is capable of breaking when a certain amount of rotational stress is applied.

Responding to the argument that Wood does not disclose a safety-fastener inserting the lock-accepting region into the lock such that the lock substantially covers the lock-accepting region, the examiner respectfully disagrees. The padlock of Wood directly engages the lock

accepting region, where a portion of the lock-accepting region is placed within the U-shaped shackle, thus a portion of the lock-accepting region is inserted into the lock. Additionally, Wood discloses the lock being placed over the lock-accepting region as shown in figure 2, where the lock is clearly above the lock-accepting region, and placed in a substantial covered position in relation. Moreover, the examiner is confused as to how a component defined to accept a lock is placed in the lock, clarification is greatly appreciated.

In response to the argument that Wood does not disclose the joint is configured to inhibit the body from moving either towards or away from the head, the examiner respectfully disagrees. Wood explicitly discloses in column 2, lines 30-40, at a position well down the shaft is a detent such as pin 24 which supports a sleeve 26 around the shaft, with the upper end of the sleeve being seated in a shoulder 28 in the boss 18 of the locker. Yet another shoulder 30 above shoulder 28 is used to capture the shaft in the container by virtue of retainer washer 32 and pin 34. Thus between the pins 24 and 34, the shoulders defined in the boss 18 and the sleeve 26, the shaft and the locker container are mutually secured against axial movement, although they are free to rotate. Accordingly, Wood discloses the joint is configured to inhibit the body from moving in either towards or away from the head.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Application/Control Number: 10/524,594

Art Unit: 3673

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER BOSWELL whose telephone number is (571)272-7054. The examiner can normally be reached on 9:00 - 4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/524,594 Page 11

Art Unit: 3673

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter M. Cuomo/ Supervisory Patent Examiner, Art Unit 3673 Christopher Boswell Examiner Art Unit 3673

CJB /cb/ June 30, 2009